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| PPLICATION NO. | FIL | ING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|------|------------|---------------------------------|-----------------------|---|
| 10/083,849 10/19/2001 | | 0/19/2001 | Mathieu Hubertus Maria Noteborn | 2906-4996.1US | 4522 |
| 24247 | 7590 | 07/01/2004 | | EXAMINER | |
| TRASK BI | | | | MCKELVEY, | TERRY ALAN |
| P.O. BOX 2550 SALT LAKE CITY, UT 84110 | | Т 84110 | | ART UNIT PAPER NUMBER | |
| | | | | 1636 | *************************************** |

DATE MAILED: 07/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

| Application No. | Applicant(s) | |
|-------------------|-----------------|--|
| 10/083,849 | NOTEBORN ET AL. | |
| Examiner | Art Unit | |
| Terry A. McKelvey | 1636 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address -- Period for Reply

| • • | | | | | |
|--|--|--|--|--|--|
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SETTHE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the If NO period for reply is specified above, the maximum statutory period will apply an Failure to reply within the set or extended period for reply will, by statute, cause the Any reply received by the Office later than three months after the mailing date of this earned patent term adjustment. See 37 CFR 1.704(b). | e event, however, may a reply be timely filed statutory minimum of thirty (30) days will be considered timely. d will expire SIX (6) MONTHS from the mailing date of this communication. | | | | |
| Status | | | | | |
| 1) Responsive to communication(s) filed on | | | | | |
| 2a) ☐ This action is FINAL . 2b) ☐ This action is | s non-final. | | | | |
| 3) Since this application is in condition for allowance exce | ept for formal matters, prosecution as to the merits is | | | | |
| closed in accordance with the practice under Ex parte | | | | | |
| Disposition of Claims | | | | | |
| 4)⊠ Claim(s) <u>1-12,14-18 and 21-25</u> is/are pending in the ap | polication | | | | |
| 4a) Of the above claim(s) is/are withdrawn from | | | | | |
| 5) Claim(s) is/are allowed. | consideration. | | | | |
| 6) Claim(s) is/are allowed. | | | | | |
| 7) Claim(s) is/are objected to. | | | | | |
| 8) Claim(s) <u>1-12,14-18 and 21-25</u> are subject to restriction | n and/or election requirement. | | | | |
| , <u> </u> | | | | | |
| Application Papers | | | | | |
| 9)☐ The specification is objected to by the Examiner. | | | | | |
| 10) The drawing(s) filed on is/are: a) accepted or | b) objected to by the Examiner. | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | |
| Replacement drawing sheet(s) including the correction is req | uired if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | |
| 11) The oath or declaration is objected to by the Examiner. | Note the attached Office Action or form PTO-152. | | | | |
| riority under 35 U.S.C. § 119 | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority ι | inder 35 U.S.C. § 119(a)-(d) or (f) | | | | |
| a) ☐ All b) ☐ Some * c) ☐ None of: | 2. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. | | | | |
| 1. Certified copies of the priority documents have b | een received. | | | | |
| 2. Certified copies of the priority documents have b | | | | | |
| 3. Copies of the certified copies of the priority docu | | | | | |
| application from the International Bureau (PCT R | - | | | | |
| * See the attached detailed Office action for a list of the ce | • • • • | | | | |
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| ttachment(s) | | | | | |
| Notice of References Cited (PTO-892) | 4) Interview Summary (PTO-413) | | | | |
| Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | Paper No(s)/Mail Date 5) Notice of Informal Patent Application (PTO-152) | | | | |
| Paper No(s)/Mail Date | 6) Other: | | | | |

U.S. Patent and Trademark Office PTOL-326 (Rev. 1-04)

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-4 and 20-24, drawn to apoptin protein and pharmaceutical composition, classified in class 530, subclass 350 and class 514, subclass 12.
- II. Claims 5-7, drawn to vector comprising nucleic acid encoding apoptin and host cell, classified in class 435, subclasses 320.1, 325, 243, and 419.
- III. Claims 8-9 and 18, drawn to antibody, immunoassay, and kit, classified in class 530, subclass 387.1.
- IV. Claims 10-12, drawn to nucleic acid encoding antibody, vector, and host cell, classified in class 536, subclass 23.1 and class 435, subclasses 320.1, 325, 243, and 419.
- V. Claim 14, drawn to method for detecting the presence of cancer cells, classified in class 435, subclass 4.
- VI. Claim 15, drawn to method for identifying a putative cancer-inducing agent, classified in class 435, subclass 29.

Application/Control Number: 10/083,849

Art Unit: 1636

VII. Claims 16-17, drawn to method for testing in vitro treatment effect of apoptin, classified in class 435, subclass 4.

VIII.Claim 25, drawn to method for treating a subject having a disease, classified in class 514, subclass 12.

The inventions are distinct, each from the other because of the following reasons:

The products of Groups I-IV are chemically, biologically, and functionally distinct from each other and thus one does not render the other obvious. The product of each group is not needed to produce the products of the other groups (each of which can be isolated from cells or organisms, made synthetically, and/or are self-replicating without the need for the isolated products of the other groups). Therefore, the inventions of the groups are capable of supporting separate patents.

Inventions of Groups V-VIII are biologically and functionally different and distinct from each other and thus one does not render the other obvious. The methods of Groups V-VIII comprise steps which are not required for or present in the methods of the other groups. The end result of the methods are

Application/Control Number: 10/083,849

Art Unit: 1636

different from each other. Thus, the operation, function and effects of these different methods are different and distinct from each other. Therefore, the inventions of these different, distinct groups are capable of supporting separate patents.

Inventions of Group I and Groups V-VIII are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the product as claimed can be used in a materially different process, as evidenced by the distinct inventions of Groups I-IV.

The inventions of Groups II-IV and Groups V-VIII are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different products of Groups II-IV are not used in or made by the methods of Groups V-VIII.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification and the search required for each

group is not required for the other groups because each group requires a different non-patent literature search due to each group comprising different products and/or method steps, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims that depend from or otherwise include all the limitations of the allowable product claim will be rejoined in accordance with the provisions of MPEP § 821.04. Process claims that depend from or otherwise include all the limitations of the patentable product will be entered as a matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier. Amendments submitted after final rejection are governed by 37 CFR 1.116;

amendments submitted after allowance are governed by 37 CFR 1.312.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103, and 112. Until an elected product claim is found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowed product claim will not be rejoined. See "Guidance on Treatment of Product and Process Claims in light of In re Ochiai, In re Brouwer and 35 U.S.C. § 103(b)," 1184 O.G. 86 (March 26, 1996). Additionally, in order to retain the right to rejoinder in accordance with the above policy, Applicant is advised that the process claims should be amended during prosecution either to maintain dependency on the product claims or to otherwise include the limitations of the product claims. Failure to do so may result in a loss of the right to rejoinder. Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. MPEP § 804.01.

Conclusion

Certain papers related to this application may be submitted to Art Unit 1636 by facsimile transmission. The faxing of such papers must conform with the notices published in the Official Gazette, 1156 OG 61 (November 16, 1993) and 1157 OG 94 (December 28, 1993) (see 37 C.F.R. § 1.6(d)). The official fax telephone number for the Group is 703-872-9306. NOTE: If Applicant does submit a paper by fax, the original signed copy should be

Application/Control Number: 10/083,849

Art Unit: 1636

retained by applicant or applicant's representative. NO DUPLICATE COPIES SHOULD BE SUBMITTED so as to avoid the processing of duplicate papers in the Office.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-0547.

Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the The Patent Electronic Business Center will notify problem. applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the

scanned images of their own application file folder(s) as well as general patent information available to the public.

For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.

Any inquiry concerning rejections or objections in this communication or earlier communications from the examiner should be directed to Terry A. McKelvey whose telephone number is (571) 272-0775. The examiner can normally be reached on Monday through Friday, except for Wednesdays, from about 7:30 AM to about 6:00 PM. A phone message left at this number will be responded to as soon as possible (i.e., shortly after the examiner returns to his office).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Remy Yucel can be reached at (571) 272-0781.

Terry A. McKelvey, Ph.D.

Jen a Milele

Primary Examiner Art Unit 1636

June 28, 2004